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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/623,761   | 07/21/2003  | John H. Laragh       | 55990/8             | 4847             |
| 31013  | 7590        | 05/16/2007           | EXAMINER            |                  |
| KRAMER LEVIN NAFTALIS & FRANKEL LLP<br>INTELLECTUAL PROPERTY DEPARTMENT<br>1177 AVENUE OF THE AMERICAS<br>NEW YORK, NY 10036 |             |                      | PETERSEN, CLARK D   |                  |
|  |             | ART UNIT             | PAPER NUMBER        |                  |
|  |             | 1657                 |                     |                  |
|  |             | MAIL DATE            | DELIVERY MODE       |                  |
|  |             | 05/16/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/623,761             | LARAGH, JOHN H.     |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Clark D. Petersen      | 1657                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 April 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 18-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

This action is in response to the amendment, filed 9 April 2007, in which claims 14-17 were canceled and new claims 18-21 were presented.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

All objections and rejections not repeated in the instant Action have been withdrawn due to Applicant's response to the previous Action.

### ***Specification***

Applicants' amendment to the abstract is acknowledged. Based on Applicants' amendment, the objection of the previous Office Action is withdrawn.

### ***Double Patenting***

Applicants' intent to file a terminal disclaimer in response to the non-provisional double patenting rejection of claims 14-17 in the Office Action dated 10 January 2007 is acknowledged. However there is no record in the USPTO files of having received such a terminal disclaimer. Until a terminal disclaimer is included in the file for the instant application, the double patenting rejection is maintained.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMahon (1978). McMahon teaches that some clinics routinely test patients for plasma renin activity, and that these patients fall into three categories: low, medium, and high renin activity hypertensive patients. McMahon teaches that low renin patients can be administered a diuretic alone, i.e., a plasma volume-changing drug. Patients with higher plasma renin activity can be administered renin-blocking or –reducing drugs (see p. 3, for example). McMahon also teaches that it is standard practice, when one drug does not appear to be working, to add a second drug of a different type, i.e. if a diuretic is not working, add a renin-blocking agent, for example (see p. 4, for example). Lastly, McMahon teaches that one should treat the hypertension, not the renin level: because hypertension is a disease of high blood pressure, one must inherently monitor the blood pressure. McMahon also teaches that it is standard practice in treating hypertensive patients to titrate the drug to a proper dosage to eliminate the hypertension; determining proper dosage inherently involves measuring the blood pressure response to a given dosage.

A person of ordinary skill in the art at the time the invention was made would have been motivated to prescribe an anti-renin drug to a patient with medium to high PRA because McMahon teaches that such patients can be administered such drugs, and alternatively patients with low PRA should be administered diuretic drugs; additionally, McMahon teaches that it is standard practice to titrate dosage to achieve

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optimal amelioration of hypertensive symptoms, and because that doctors should treat the hypertension, it is inherent that blood pressure should be monitored because hypertension is a disease of high blood pressure.

Hence, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to prescribe a diuretic or renin-blocking drug based on PRA measurement, and to modulate dosages based on blood pressure response to drug administration.

Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMahon (1978) in view of Laragh (1998).

The teachings of McMahon are discussed above and applied as before.

McMahon does not expressly teach that a threshold level of plasma renin activity is 0.65 ng/ml/h.

Laragh teaches exactly that threshold as a guide for diagnosing primary aldosteronism (see p. 171S, col. 2, for example). Laragh teaches that finding a baseline plasma renin activity for every new patient greatly facilitates drug choice. The goal is to find the primary pressor mechanism: high renin indicates an anti-renin drug, while low renin indicates an antivolume drug. Laragh further teaches that the PRA test guides, simplifies, and hastens the selection of the right single drug for each patient (see p. 171S, col. 2, for example).

A person of ordinary skill in the art at the time the invention was made would have been motivated to treat a hypertensive with an anti-renin drug if their PRA was

greater than 0.65 ng/ml/h because Laragh teaches that below that level the underlying pathology probably involves primary aldosteronism rather than renin-mediated hypertension.

Hence, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to prescribe a renin-blocking drug above 0.65 ng/ml/h PRA.

### ***Response to arguments - 35 USC § 103***

Applicants traverse the rejection under 35 USC 103(a) as being unpatentable over McMahon (1978), as well as the rejection as being unpatentable over McMahon (1978) in view of Laragh (1998).

Applicants argue that McMahon does not suggest that clinics that measure renin use those measurements to direct a course of treatment and that, in fact, McMahon teaches away from the use of renin measurements in directing a course of treatment for hypertension (Remarks, p. 8).

Applicants further argue that Laragh does not remedy the deficiencies of McMahon, as this reference teaches no course of treatment analogous to that instantly claimed (Remarks, p. 9). Applicants also argue that there is no motivation to combine the two references to arrive at the instantly claimed invention.

Applicants' arguments have been fully considered but are not deemed persuasive.

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McMahon states that his own opinion is that an initial measurement of renin levels is not the most efficient approach to treating hypertension, rather careful monitoring of blood pressure alone is prudent, as noted by Applicants (McMahon, p. 4). However McMahon notes that the issue is not resolved, and that there is a faction among clinicians that advocates the initial measurement of renin. He therefore discloses that the use of renin levels as a guide to medication is anticipated as early as 1978 (see McMahon, p.3). He teaches that high renin patients respond well to beta-adrenergic blocking agents, whereas low renin patients respond well to anti-diuretic agents. As stated in the previous Office Action, he also states that it is common practice to either increase dosage or substitute medications when a particular course of treatment does not have the desired efficacy (see p. 4), and in a disease of blood pressure, efficacy is directly measured by its effect on blood pressure. Therefore it would be obvious to combine the teachings of McMahon. He acknowledges that measurement of renin is an accepted part of diagnosing blood pressure, he teaches that medication can be prescribed on the basis of renin levels, and he teaches that medications are titrated or substituted in situations of poor patient response. Therefore it would be obvious to one of ordinary skill in the art to arrive at the present invention.

The only facet lacking is a definition of the normal physiological level of renin, and one of ordinary skill in the art would be led by the teachings of McMahon to seek information on renin physiology. Such a search would lead him or her to the teachings of Laragh. As stated in the previous Office Action, Laragh teaches that levels of renin less than or equal to 0.65 ng/ml/hr are not a pathological factor in hypertension.

Therefore it would have been obvious to one of ordinary skill in the art to use the threshold of 0.65 ng/ml/hr of renin activity in deciding a course of treatment for a patient afflicted with hypertension.

***Conclusion***

No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark D. Petersen whose telephone number is (571)272-5358. The examiner can normally be reached on M-F 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on (571)272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CDP  
5/8/2007



A handwritten signature in black ink, appearing to read "Jon. Weber".

**Jon Weber**  
**Supervisory Patent Examiner**